

Bur Oak

Quercus macrocarpa

Mossycup Oak

Bur Oak is a huge tree reaching a height and spread of 70-90 feet and has an impressive crown, massive trunk, and stout branches. The bark is brown to gray and deeply furrowed on older trees. Young growth has corky ridges. Acorns are almost completely encased with a furry, bur-like cap (from which it takes its name), and are quite large. Young trees have an attractive, symmetrical, dense crown and are well suited for street plantings. The wood is heavy, hard, strong, and durable. It is used for much the same purposes as other white oaks, including lumber, flooring, furniture, and fuel. It is very tolerant of urban air pollutants and of soils that are compacted, dry, and/or high pH. Bur Oak is useful in rehabilitation of degraded sites and have been widely planted in shelterbelts because of their drought tolerance. Can live to 1000 years. State tree of Iowa.



Identification

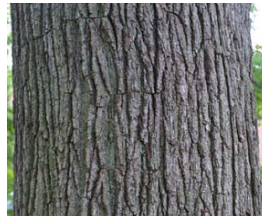
Leaves

Leaves are deciduous, alternate, obovate, shaped like a fiddle, tapering to a wedge shaped base. Glossy dark green above, gray-green below.



Bark/Wood

Bark is light brown to light gray, thick, rough, furrowed into scaly plates and vertical flattened ridges. Wood is heavy, hard, strong, and durable.



Flower/Fruit

Monoecious; male and female flowers are borne in separate catkins on the current year's branches. Fruit large (to 2") with fringed cup 3/4 of acorn.



Form

Attractive symmetrical, dense crown when young. With age, broad top of heavy, spreading branches and short body. Deeply taprooted.



Uses

Commonly planted as shade tree, parking islands, and rehabilitation of degraded sites. Wood used and marketed as white oak, cabinetry, flooring, barrels, and fuel. Acorns are eaten by many birds and mammals.

Ethnobotany

Native Americans made a bark decoction with astringent properties used to treat diarrhea, wounds and sores, hemorrhoids, poison oak, and insect bites. The large, sweet acorns have been eaten boiled and raw.

Native Distribution

North central United States and eastern Great Plains. New England west to the Dakotas and south.

Establishment

Seed can be planted in fall or spring. Deep taproot makes transplanting difficult.

Growing Conditions and Culture

Mature Size 80'Hx75'Wx6'dbh
 USDA Zone 3-8
 Light Requirements Full Sun

Soils Diverse
 Drought Tolerant? Yes
 Inundation Tolerant? Yes

Pests/Damaging Agents

Few insects or disease cause serious damage to Bur Oaks. Gypsy moth feeds on it, but not fatally. Anthracnose can be an issue in wet climates. Resistant to oak wilt. Fire resistant.

Similar Species

White Oak
 Leaves are similar. Bur Oak differs in that it has a pair of deep sinuses toward the base and wavy notches on the broad, middle, and upper portions.

Propagation

Seed - no pregermination requirements.

Source(s)

Collected as seed from Cornell Plantation, NY.